Federation of Malysia

EDICT OF GOVERNMENT

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ASD 401 (2008) (English): Control And Denotation Of Obstacles

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AIRPORT STANDARDS DIRECTIVE 401
[ASD 401]

CONTROL AND DENOTING OBSTACLES

AIRPORTS STANDARDS DIVISION
DEPARTMENT OF CIVIL AVIATION MALAYSIA

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INTRODUCTION

1. Natural features and man-made constructions, inside and outside its boundary, may considerably influence the effective utilisation of an aerodrome. For this reason certain areas of the local airspace shall be regarded as integral parts of the aerodrome environment.

2. The Civil Aviation Act 1969 has made provisions for the control and the denoting of obstacles on and in the vicinity of aerodromes to ensure air navigation could be conducted safely.

3. This Airport Standards Directive [Directive] outlines the application of provisions under the Act in the form of rules, instructions and practices pertaining to the limitation of obstacles and indication of their presence; to which aerodrome operator, local authority, developer or property owner shall be informed and oblige to comply.

4. This Directive has been written in general terms. Specific advice could be obtained from the Authority at:

Department of Civil Aviation
Airport Standards Division
No. 27 Persiaran Perdana
Level 1 Block Podium B 4G4 Precinct 4
Federal Government Administration Offices
62570 Putrajaya.
Phone: 03-88714000
Fax : 03-88714335

OBJECTIVE

5. This Directive defines the environs, at and around aerodromes, to be maintained free from obstacles so as to permit the intended aircraft operations at aerodromes to be conducted safely and to prevent the aerodromes from becoming unusable by the growth of obstacles around the aerodromes.

6. Where obstacles prevail, this Directive ensures that the presence of obstacles is appropriately indicated to reduce hazards to aircraft.

OBSTACLE LIMITATION RULES

7. No fixed objects that may constitute as obstacles, other than equipment and installations required for air navigation purposes and satisfying the relevant frangibility requirement, shall be permitted to be located and/or constructed on a runway strip, a runway end safety area, a taxiway strip or within the taxiway clearance distance or on a clearway.

8. New objects or extension of existing objects shall not be permitted above any obstacle limitation surfaces, except when, in the opinion of the Department of Civil Aviation, the new object or extension would be shielded by an existing immovable object.

9. New objects or extension of existing objects shall not be permitted above any obstacle limitation surfaces, except when, in the opinion of the Department of Civil Aviation, and following an aeronautical study that the object would not adversely affect the safety or significantly affect the regularity of operations of aircraft.

10. Existing objects above any of the obstacle limitation surfaces should as far as practicable be removed except when, in the opinion of the Department of Civil Aviation, the object is shielded by an existing immovable object or, after an aeronautical study, that the object would not adversely affect the safety or significantly affect the regularity of operations of aircraft.

11. The erection of any structure or planting of any trees or other high vegetation which is likely to be higher than the height limits of a declared controlled area is prohibited, absolutely or conditionally.

DEFINITION OF OBSTACLES

12. Objects defined as obstacles are as follows:

    (i) Fixed objects, whether temporary or permanent, and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft are obstacles.

    (ii) Fixed objects, whether temporary or permanent, that are extended above defined surfaces intended to protect aircraft in flight are obstacles.

    (iii) Objects that penetrate the obstacle limitation surfaces are obstacles.

    (iv) Objects that extend to a height of 100 metres or more above ground elevation are obstacles in areas beyond the limits of obstacle limitation surfaces [outside 15 000 metres radius of the Aerodrome Reference Point]

    (v) Overhead wires and cables crossing a river, valley or highway, and their supporting towers, are obstacles if an aeronautical study indicates that the wires or cables could constitute a hazard to aircraft.

OBSTACLES AT AERODROME

13. Certain aerodrome equipment and installations, although are obstacles but because of their air navigation functions, must inevitably be so located and/or constructed on a runway strip, a runway end safety area, a taxiway strip or within the taxiway clearance distance or on a clearway. Equipment and installations allowed are limited to that listed in Appendix A.

14. Equipment and installations other than those listed in Appendix A should not be permitted to be obstacles.

15. Aerodrome vehicles, maintenance or service, are generally temporary obstacles.

OBSTACLE LIMITATION SURFACES

16. Obstacle limitation surfaces, established to define the volume of airspace that should ideally be kept free from obstacles in order to minimise the dangers presented by obstacles to an aircraft, are defined in Appendix B.

17. The essential surfaces of the obstacle limitation surfaces that shall be established for any runway are:

    (i) Approach Surface;
    (ii) Transitional Surface;
    (iii) Inner Horizontal Surface; and
    (iv) Conical Surface.

18. The obstacle limitation surfaces that shall be established for precision approach runway category II or III, in addition to the essential surfaces, are:

    (i) Inner Approach Surface;
    (ii) Inner Transitional Surface; and
    (iii) Balked Landing Surface.

19. The obstacle limitation surfaces established for runway meant for take-off is:

    (i) Take-off Climb Surface.

20. The surfaces established should allow for existing operations and also for the ultimate development envisaged for the aerodrome.

21. The elevation datum above which the surfaces are measured will be the elevation of the runway threshold.

22. Obstacle limitation surfaces dimension and slopes shall be consistent with those specified in Appendix C.

CONTROLLED AREA

23. A controlled area of defined in dimension and height, declared by order, in the vicinity of an aerodrome or an aid to air navigation, should be cleared or kept clear of any objects that extend or may extend above the specified height limits of the controlled area or any part of such area.

NOTIFICATION OF PROPOSED OBSTACLE

24. Any development that may penetrate the obstacle limitation surfaces, including construction, establishment or erection of objects that may be regarded as obstacles at an aerodrome, shall be referred to the Department of Civil Aviation for review. The review would examine the effect of the envisaged construction on air navigation and on operational procedures in use.

25. In considering proposed construction, account shall be taken of possible future development at the aerodrome and consequent requirement for more stringent obstacle limitation surfaces.

26. The obligation to notify of any proposed construction, or part thereof, which may constitute or generate obstacles, shall rest with the local authority, the developer or the property owner.

26(a) Notification of construction, establishment or erection of objects that may constitute as obstacles shall be made to the Department of Civil Aviation for approval via Application Form DCA.OCL1 [Appendix D]

27. Where an obstacle is to be located on the aerodrome, the aerodrome operator is responsible for notifying such construction.

28. The Department of Civil Aviation may permit the proposed construction under certain terms and conditions to ascertain continued safety of air navigation.

REMOVAL OF OBSTACLE

29. Objects located on an area intended for the surface movement of aircraft should, apart from those required for air navigation purposes, as far as practicable, be removed.

30. Objects above any of the obstacle limitation surfaces and located on an area intended for the surface movement of aircraft should, as far as practicable, be removed.

31. Objects above any of the obstacle limitation surfaces may be permitted if, in the opinion of the Department of Civil Aviation, an existing immovable object shields the object, and result of an aeronautical study indicates that the object would not adversely affect the safety or significantly affect the regularity of operations of aircraft.

32. Objects above the specified height of a declared controlled area, by notice in writing, shall be removed or reduced in height, if those objects cause obstruction to aircraft or hinder the operation of any aid to air navigation.

SHIELDING

33. Shielding principles are employed when some permanent object, an existing building or terrain, already penetrate above one of the obstacle limitation surface. Then additional objects within a specified area around it may be permitted to penetrate the surface without being considered as obstacles.

34. Shielding shall be based on a horizontal plane projected from the top of the obstacle away from the runway and a plane with a negative slope of 10% towards the runway. Any objects below either the two planes would be considered shielded.

35. The permission to allow objects to penetrate an obstacle limitation surface under the shielding principle shall, however, be qualified by reference to the need of an aeronautical study in all cases.

AERONAUTICAL STUDY

36. An aeronautical study may be conducted to assess the impact of deviations from standards pertaining to obstacle limitation surfaces and to present alternatives means of ensuring safety to aircraft operations, to estimate the effectiveness of the alternatives and to recommend procedures to compensate for the deviation.

37. The aeronautical study shall provide justification for the deviation on grounds that an equivalent level of safety can be attained by other means. This is generally applicable when the cost of correcting for compliance is excessive but where the unsafe effects can be overcome by some procedural means.

MARKING AND LIGHTING OF OBSTACLES

38. Where it is impractical to eliminate an obstacle, it should be appropriately marked and/or lighted so as to be clearly visible to pilots in all weather and visibility conditions.

39. Marking and lighting of obstacle is intended to reduce hazards to aircraft by indicating the presence of obstacles. It does not necessarily reduce operating limitations that may be imposed by the obstacle.

40. Obstacle shall be marked and, if the aerodrome is used at night, lighted except that:

    (i) such marking and lighting may be omitted when the obstacle is shielded by another fixed obstacle.

    (ii) the marking may be omitted when the obstacle is lighted by high intensity obstacle lights by day.

    (iii) the lighting may be omitted where the obstacle is a lighthouse and an aeronautical study indicates the lighthouse light to be sufficient.

    (iv) obstacle lights shall not be installed on elevated aeronautical ground lights and signs in the movement area.

41. Vehicles and other mobile objects, excluding aircraft, on the movement area are obstacles and shall be marked and lighted, unless used only on aprons.

41(a) Application for obstacle lighting approval shall be made to the Department of Civil Aviation via Application Form OL.APL1 [Appendix E]

MAINTENANCE OF MARKING AND LIGHTING

42. Installation and maintenance of required marking and lighting shall be done by the local authority, the property owner or the aerodrome operator.

43. Aerodrome operator should make a daily visual inspection of all obstacle lights on and around the aerodrome, and take steps to have inoperative lights replaced or repaired.

44. At commercial or industrial sites, the property owner should make a daily visual inspection of all obstacle lights, and take steps to have inoperative lights replaced or repaired.

REPORTING OF OBSTACLES

45. Aerodrome operator should make frequent observations of surrounding areas to determine the presence of new obstacles. Whenever an obstacle is identified, it should be reported promptly to the Department of Civil Aviation.

46. Local authorities, developer or property owner shall report of new construction that may constitute new obstacles.

47. The Department of Civil Aviation shall notify and publish changes in obstacle data in the appropriate Aeronautical Information Services publications.

DEVIATIONS

48. The Department of Civil Aviation shall notify and publish deviations from any Standards and Recommended Practices contained in ICAO Annex 14 in the appropriate Aeronautical Information Services publications in compliance to the Article 38 of the Convention on International Civil Aviation.

49. The Appendices to this Directive shall be taken, construed, read and be part of this Directive.

DATO' IR. KOK SOO CHON
Director General
Department of Civil Aviation
Malaysia

Dated: 20 May 2005

AMENDMENT RECORD

Amendment Number	Amendment Date	Incorporated by	Incorporated on
1/2005	22 Sep 2005	Para 48 / App B	22 Sep 2005
1/2006	4 Jan 2006	Para 19	4 Jan 2006
1/2008	9 Jul 2006	Para 4 / Para 26 (a) / Para 41 (a) / App D / App E	9 Jul 2008

APPENDIX A

AERODROME OBSTACLES

Equipment and installations allowed on runway strip, a runway end safety area, a taxiway strip or within the taxiway clearance distance or on a clearway.

(a) ILS glide path antennas
(b) ILS inner marker beacons
(c) ILS localiser antennas
(d) wind direction indicators
(e) landing direction indicators
(f) anemometers
(g) ceilometers
(h) transmissometers
(i) elevated runway edge, threshold, end and stopway lights
(j) elevated taxiway edge lights
(k) approach lights
(l) VASIS or PAPI
(m) signs and markers
(n) components of the microwave landing system (MLS)
(o) certain radar and other electronic installations not itemised above
(p) VOR or VOR/DME when located on aerodromes
(q) Precision approach radar system and elements
(r) VHF direction finders.

APPENDIX B

OBSTACLE LIMITATION SURFACES

1. OUTER HORIZONTAL SURFACE

1.1 Description
A surface located in a horizontal plane above an aerodrome and its environs.

1.2 Characteristics
The radius or outer limits of the outer horizontal surface shall be 15,000 metres measured from the aerodrome reference point.

1.3 The height of the outer horizontal surface shall be measured 150 metres above the lowest reference point elevation.

2. CONICAL SURFACE

2.1 Description
A surface sloping upwards and outwards from the periphery of the inner horizontal surface

2.2 Characteristics
The limits of the conical surface shall comprise –
(a) a lower edge coincident with the periphery of the inner horizontal surface; and
(b) an upper edge located at a specified height above the inner horizontal.

2.3 The slope of the conical surface shall be measured in a vertical plane perpendicular to the periphery of the inner horizontal.

3. INNER HORIZONTAL

3.1 Description
A surface located in a horizontal plane above an aerodrome and its environs.

3.2 Characteristics
The radius or outer limits of the inner horizontal surface shall be measured from the aerodrome reference point, for a single circular surface, or the thresholds of the runway, for racetrack surface. The shape of the inner horizontal surface, therefore, need not necessarily be circular.

3.3 The height of the inner horizontal surface shall be measured above the lowest reference point elevation.

4. APPROACH SURFACE

4.1 Description
An inclined plane or combination of planes preceding the threshold.

4.2 Characteristics
The limits of the approach surface shall comprise -
(a) an inner edge of specified length, horizontal and perpendicular to the extended centreline of the runway and located at a specified distance from the threshold;
(b) two sides originating at the ends of the inner edge and diverging at a specified rate from the extended centreline of the runway; and
(c) an outer edge parallel to the inner edge.

4.3 The elevation of the inner edge shall be equal to the elevation of the mid-point of the threshold.

4.4 The slope(s) of the approach surface shall be measured in the vertical plane containing the centreline of the runway.

5. **INNER APPROACH SURFACE**

5.1 Description
A rectangular portion of the approach surface immediately preceding the threshold.

5.2 Characteristics
The limits of the inner approach surface shall comprise -
(a) an inner edge coincident with the location of inner edge of the approach surface but of its own specified length;
(b) two sides originating at the ends of the inner edge and extending parallel to the vertical plane containing the centreline of the runway; and
(c) an outer edge parallel to the inner edge.

6. **TRANSITIONAL SURFACE**

6.1 Description
A complex surface along the side of the strip and part of the side of the approach surface, that slope upwards and outwards to the inner horizontal.

6.2 Characteristics
The limits of the transitional surface shall comprise -
(a) a lower edge beginning at the intersection of the side of the approach surface with the inner horizontal surface and extending down the side of the approach surface to the inner edge of the approach surface and from there along the length of the strip parallel to the runway centreline; and
(b) an upper edge located in the plane of the inner horizontal surface.

6.3 The elevation of a point on the lower edge shall be –
(a) along the side of the approach surface – equal to the elevation of the approach surface at that point; and
(b) along the strip – equal to the elevation of the nearest point on the centreline of the runway or its extension.

6.4 The slope of the transitional surface shall be measured in a vertical plane at right angles to the centreline of the runway.

6.5 The transitional surface is intended to be the controlling obstacle limitation surface for buildings at the aerodrome.

7. **INNER TRANSITIONAL SURFACE**

7.1 Description
A surface similar to the transitional surface but closer to the runway.

7.2 Characteristics
The limits of an inner transitional surface shall comprise -
(a) a lower edge beginning at the end of the inner approach surface and extending down to the side of the inner approach surface to the inner edge of the surface, from there along the strip parallel to the runway centreline to the inner edge of the balked landing surface and from there up the side of the balked landing surface to the point where the side intersects the inner horizontal surface; and
(b) an upper edge located in the plane of the inner horizontal surface.

7.3 The elevation of a point on the lower edge shall be –
(a) along the side of the inner approach surface and balked landing surface – equal to the elevation of the particular surface at that point; and
(b) along the strip – equal to the elevation of the nearest point on the centreline of the runway or its extension.

7.4 The slope of the inner transitional surface shall be measured in a vertical plane at right angles to the centreline of the runway.

7.5 The inner transitional surface is intended to be the controlling obstacle limitation surface for navigation aids, aircraft and other vehicles that must be near the runway and which is not to be penetrated except for frangible objects.

8. **BALKED LANDING SURFACE**

8.1 Description
An inclined plane located at a specified distance after the threshold, extending between the inner transitional surface.

8.2 Characteristics
The limits of the balked landing surface shall comprise -
(a) an inner edge horizontal and perpendicular to the centreline of the runway and located at a specified distance after the threshold;
(b) two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the vertical plane containing the centreline of the runway; and
(c) an outer edge parallel to the inner edge and located in the plane of the inner horizontal.

8.3 The elevation of the inner edge shall be equal to the elevation of the runway centreline at the location of the inner edge.

8.4 The slope of the balked landing surface shall be measured in a vertical plane at right angles to the centreline of the runway.

9. **TAKE-OFF CLIMB SURFACE**

9.1 Description
An inclined plane or other specified surface beyond the end of a runway or clearway.

9.2 Characteristics
The limits of the take-off climb surface shall comprise -
(a) an inner edge horizontal and perpendicular to the centreline of the runway and located either at a specified distance beyond the end of the runway or at the end of the clearway when such is provided and its length exceeds the specified distance;
(b) two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the take-off track to a specified final width and continuing thereafter at that width for the remainder of the length of the take-off climb surface; and
(c) an outer edge horizontal and perpendicular to the specified take-off track.

9.3 The elevation of the inner edge shall be equal to the highest point on the extended runway centreline between the end of the runway and the inner edge, except when a clearway is provided the elevation shall be equal to the highest point on the ground on the centreline of the clearway.

9.4 In the case of a straight take-off path, the slope of the take-off climb surface shall be measured in the vertical plane containing the centreline of the runway.

9.5 In the case of a take-off flight path involving a turn, the take-off climb surface shall be a complex surface containing the horizontal normals to its centreline, and the slope of the centreline shall be the same as that for a straight take-off flight path.

APPENDIX C

DIMENSION AND SLOPES
OBSTACLE LIMITATION SURFACES

RUNWAY CLASSIFICATION

	Non-instrument				Non-Precision			Precision		
								I		II or III
	Code number				*Code number*			*Code number*		*Code number*
Surface and dimension①	1	2	3	4	1,2	3	4	1,2	3,4	3,4
CONICAL										
Slope	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Height	35m	55m	75m	100m	60m	75m	100m	60m	100m	100m
INNER HORIZONTAL										
Height	45m	45m	45m	45m	45m	45m	45m	45m	45m	45m
Radius	2 000m	2 500m	4 000m	4 000m	3 500m	4 000m	4 000m	3 5000m	4 000m	4 000m
INNER APPROACH										
Width	-	-	-	-	-	-	-	90m	120m④	120m④
Distance from threshold	-	-	-	-	-	-	-	60m	60m	60m
Length	-	-	-	-	-	-	-	900m	900m	900m
Slope	-	-	-	-	-	-	-	2.5%	2%	2%
APPROACH										
Length of inner edge	60m	80m	150m	150m	150m	300m	300m	150m	300m	300m
Distance from threhold	30m	60m	60m	60m	60m	60m	60m	60m	60m	60m
Divergence (each side)	10%	10%	10%	10%	15%	15%	15%	15%	15%	15%
First section										
Length	1 600m	2 500m	3 000m	3 000m	2 500m	3 000m	3 000m	3 000m	3 000m	3 000m
Slope	5%	4%	3.33%	2.5%	3.33%	2%	2%	2.5%	2%	2%
Second section										
Length	-	-	-	-	-	3 600m②	3 600m②	3 600m②	3 600m②	3 600m②
Slope	-	-	-	-	-	2.5%	2.5%	3%	2.5%	2.5%
Horizontal section										
Length	-	-	-	-	-	8 400m②	8 400m②	-	8 400m②	8 400m②
Total length	-	-	-	-	-	15 000m	15 000m	15 000m	15 000m	15 000m
TRANSITIONAL										
Slope	20%	20%	14.3%	14.3%	20%	14.3%	14.3%	14.3%	14.3%	14.3%
INNER TRANSITIONAL										
Slope	-	-	-	-	-	-	-	40%	33.3%	33.3%
BALKED LANDING										
Length of inner edge	-	-	-	-	-	-	-	90m	120m⑤	120m⑤
Distance from threhold	-	-	-	-	-	-	-	③	1 800m④	1 800m④
Divergence (each side)	-	-	-	-	-	-	-	10%	10%	10%
Slope	-	-	-	-	-	-	-	4%	3.33%	3.33%

RUNWAY CLASSIFICATION

		Code number	
Surface and dimension①	1	2	3 or 4
TAKE-OFF CLIMB			
Length of inner edge	60m	80m	180m
Distance from runway end⑥	30m	60m	60m
Divergence (each side)	19%	10%	12.5%
Final width	380m	580m	1 200m 1 800m⑦
Length	1 600m	2 500m	15 000m
Slope	5%	4%	2%⑧

❶ All dimension are measured horizontally unless specified otherwise
❷ The approach surface shall be horizontal beyond the point where slope intersects a horizontal plane 150 metres above threshold elevation or a horizontal plane passing through the top of any object that governs the OCA/H
❸ Distance to the end of strip
❹ Or end of runway whichever is less
❺ Where the code letter is F, the width is increased to 155 metres
❻ The take-off climb surface starts at the end of clearway if clearway length exceeds the specified distance
❼ 1800 metres when the intended track includes changes of heading greater than 15 degrees for operations conducted in IMC, VMC by night
❽ If the specified slope is reduced, corresponding adjustment shall be made to the length of take-off climb surface to provide protection to a height of 300 metres.
❾ If no objects reaches 2% take-off climb surface, new object should be limited to preserve the existing obstacle free surface down to a slope of 1.6%.

APPENDIX D

APPLICATION FORM DCA.OCL1

DCA.OCL 1

JABATAN PENERBANGAN AWAM MALAYSIA

PERMOHONAN KELULUSAN PEMBINAAN STRUKTUR / BANGUNAN MENGIKUT AKTA PENERBANGAN AWAM 1969 DAN ICAO ANNEX 14

Saya bagi pihak

Sendiri /

Mewakili syarikat :

Beralamat di :

dengan ini memohon kelulusan ketinggian bangunan bagi cadangan projek yang maklumatnya adalah seperti berikut:

1. Negeri: ..... Mukim: .....

   Lot No.: ..... No. Pelan: .....

2. Lapangan Terbang Terdekat: .....

3. *Jarak dari Aerodrome Reference Point: .....
   (Lat/Long .....)

4. *Jarak pada `Runway Extended Centre line' dari Threshold:
   (Rujuk Rajah 1)

   X = ...

5. *Jarak ke tepi dari `Runway Extended Centre line'
   (Rujuk Rajah 1)

   Y = ...

6. Ketinggian tapak dari aras laut (ground elevation): .....

7. Ketinggian puncak bangunan yang dicadangkan: .....

8. Ketinggian puncak bangunan/struktur dari aras laut: .....
   (Perkara 6 + Perkara 7 = Perkara 8)

9. Koordinat tapak: MRT(Lat/Long) .....

   WGS 84 .....

10. Bangunan sedia ada berhampiran tapak cadangan (jika ada):

*Jarak dari Aerodrome Reference Point: .....
(WGS 84 / MRT)

*Jarak pada `Runway Extended Centre line' dari Threshold:
(Rujuk Rajah 1)
X = ...

*Jarak ke tepi dari `Runway Extended Centre line'
(Rujuk Rajah 1)
Y = ...

Ketinggian tapak dari aras laut (ground elevation): .....

Ketinggian puncak bangunan: .....

Ketinggian puncak bangunan/struktur dari aras laut: .....

* Catatan: *Lengkapkan mana yang berkenaan*

11. Bersama-sama ini disertakan dua (2) set Pelan Kunci, Pelan Lokasi, Pelan Bangunan dan Pelan yang merangkumi jarak kedudukan tapak (diwarnakan) dari Lapangan Terbang untuk tindakan tuan (Sauz A3 boleh diterima)

12. Saya juga memahami bahawa sekiranya dokumen-dokumen yang saya kemukakan adalah lengkap dan tepat, saya akan mendapat jawapan/kelulusan dalam masa 30 hari dari tarikh terima permohonan oleh Jabatan Penerbangan Awam.

Sekian, terima kasih.

.....
(Tandatangan)

Nama: ..... Cop Syarikat:

Jawatan: .....

Tarikh : .....

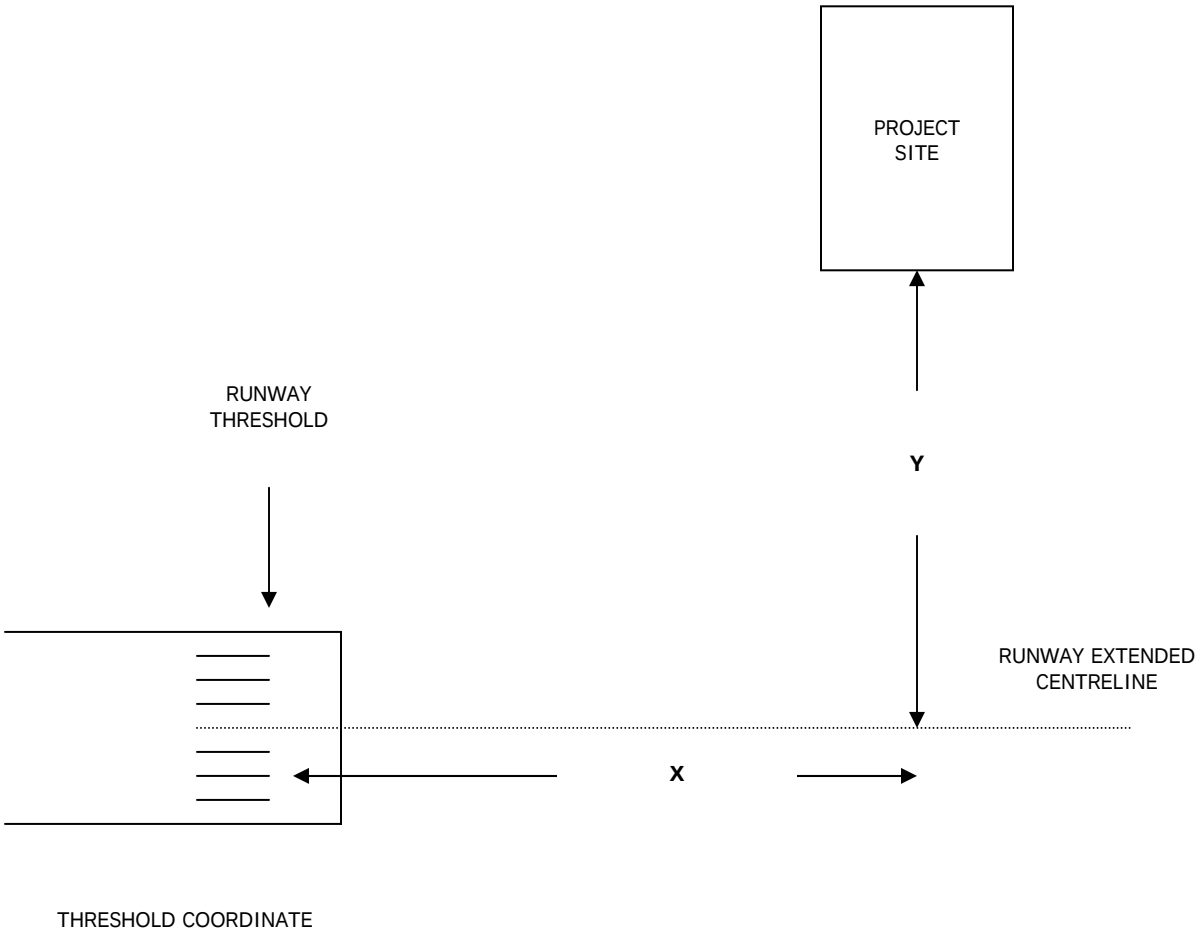
Untuk kegunaan Jabatan Penerbangan Awam

Tarikh terima: ..... Tarikh jawapan: .....

Pegawai Pelulus: ..... Tandatangan: .....

Tindakan NOTAM: .....

Rajah 1 Nilai X dan Y



APPENDIX D

OBSTACLE LIGHT APPLICATION FORM OL/APL1

OL / APL1

JABATAN PENERBANGAN AWAM MALAYSIA

[DEPARTMENT OF CIVIL AVIATION MALAYSIA]

PERMOHONAN KELULUSAN PEMASANGAN LAMPU GALANGAN

[APPLICATION FOR OBSTACLE LIGHT INSTALLATION APPROVAL]

1. MAKLUMAT PEMOHON
[PARTICULARS OF APPLICANT]

1.1 **Name :** ……

1.2 **Address :** ……

……..

…….. **Postal Code :** …….

1.3 **Position :** ……

1.4 **Telephone :** …… **Facsimile :** …….

1.5 Is the Applicant the Owner* of the Obstacle Light ? YES/NO

<u>If NO</u>, provide name and address of the Owner of the obstacle light :

1.6 **Name :** ……

1.7 **Address :** ……

……..

…….. **Postal Code :** …….

1.8 **Position :** ……

1.9 **Telephone :** …… **Facsimile :** …….

<u>Note</u> :
[*] Owner is the person[s] or company designated as building owner in-charge and that will be responsible for giving effect to the condition of the Obstacle Light approval.

2. MAKLUMAT TAPAK BANGUNAN
[PARTICULARS OF BUILDING SITE]

2.1 **Name & building address :** ……

……

……

……

2.2 **Geographical Location (LAT/LONG) or bearing from nearest airport** **:** …….

2.3 **Distance from nearest Airport** **:** ……. ……. Metre

2.4 **Height of building** **:** …… Metre from ground level

: ……... Meter from sea level

2.5 **Is there a structure in the proximity with a height exceeding the building? YES/NO**

<u>If YES</u>, state the :

i. Height of structure **:** ……. Metre from ground level

……. Metre from sea level

ii. Distance of structure from building **:** …….. Metre

3. MAKLUMAT LAMPU GALANGAN
[PARTICULARS OF OBSTACLE LIGHT]

3.1 **Light types *** **:**

DCA/L/A
DCA/L/B
DCA/M/A
DCA/M/B
DCA/H/A
DCA/H/B

Note :
Provide copy of Obstacle Lights Certificate issued by DCA Malaysia for the above proposed obstacle lights

3.2 **Light life expectancy** **:** …….. Hours

3.3 **Colour *** **:** Red/White

3.4 **Intensity *** **:** ……. Candelas

3.5 **Operation *** **:** Fixed/ ……..……..flash per minutes
Photocell / Time Switch / Both

3.6 **Second power supply * :** Standby Gen-set / Battery / Both

3.7 **Control Panel *** **:** Provided/Not Provided

- **Delete if not applicable**

4. MAKLUMAT SUSUNATUR LAMPU GALANGAN
[PARTICULARS OF CONFIGURATION OBSTACLE LIGHT]

4.1 **Dimension of building peak :** Length : …… Metre

Wide : …… Metre

4.2 **Location of installation * :** Above Roof / Tower / Antenna or
if others [please state] ……

……...

……

4.3 **Distance between lamps [if nos. of lamp more than one] :** …… Metre

4.4 **Maintenance facilities * :** Provided/Not Provided

4.5 **Installation structure** * : Good/Not Good

- **Delete if not applicable**

5. PENGESAHAN
[CERTIFICATION]

I hereby -

[i] apply for approval to install the obstacle light [* on behalf of the owner of building above shown]

[ii] certify that the foregoing information is correct in every respect and no relevant information has been withheld.

* Delete if not applicable

…… ……
[Signature of Applicant] [Company stamp]

Name : ……

Position : ……

Date : ……

MAKLUMAN
[INFORMATION]

[i] Completed Application Form together with **Obstacle Lights Certificate, Obstacle Lights Specification Catalogue [original] and As-Built/Construction Drawing** [top and side elevation indicating location of the obstruction light] certified by a professional engineer shall be submitted to the Director of Airport Standard at the following address :

Department of Civil Aviation
Airport Standards Division
No. 27 Persiaran Perdana
Level 1 Block Podium B 4G4 Precinct 4
Federal Government Administration Offices
62818 PUTRAJAYA.

FOR OFFICE USE :

……..

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